## What is Claimed is:

1. A method for estimating noise in an integrated circuit substrate, comprising the steps of:

creating a model file for a technology process for fabricating the integrated circuit;

estimating noise generated by a digital circuit and input/output circuitry to be implemented in the integrated circuit;

generating a substrate netlist for the integrated circuit;

determining a floorplan for the integrated circuit;

running transient simulations with predetermined input values;

determining if predetermined noise requirements are met in results of the transient simulations.